

comial infection was determinate as the direct cause of the dead in 49 (38.5%) patients. The highest mortality rate belonged to the PICU with 83.3% (10/12), follow by the NICU 71.4% (15/21); the mortality rate in the Newborn Unit was 70.5% (12/17); in contrast in the Surgery department the mortality rate was 0. In 65 of the cases at least one microorganism was isolated, being *K. pneumonia* Extended Spectrum Beta Lactamases (ESBLs), the most frequently isolated, 21.5% (14/65), it was also responsible of mostly of the mortal cases, and by area the most isolated from the NICU. No MRSA was isolated in this revision.

**Conclusion:** Although the creation of the Nosocomial Infections Surveillances Committee, the nosocomial infections, its burden in costs, morbidity and mortality continuing being a big concern, especially in the NICU and Newborn Unit. Moreover, the high costs of the treatment for those kinds of infections sometimes are not affordable for patients in a weak healthcare system.

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**Predominance of diarrhoeagenic *E.coli* in hospital acquired diarrhoea in a case-controlled study in a tertiary care hospital in North India**

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**Background:** In developing countries nosocomial diarrhea is an important cause of mortality and morbidity in paediatric patients. Many bacterial agents such as *Salmonella*, *Shigella*, different pathotypes of Diarrhoeagenic *E.coli*, *Clostridium difficile* etc. have been reported to cause outbreaks. We wanted to establish an etiological and epidemiological profile of nosocomial diarrhoea among children admitted to the APC at PGIMER, India so that appropriate preventive measures can be formulated.

**Methods:** From January 2008 to June 2009, we systematically enrolled 100 children between the age of 2 months and 14 years as having nosocomial diarrhoea and 50 patients as control subjects. Stool samples were processed for bacterial agents by culture. Diarrhoeagenic *E.coli* were screened by using a multiplex PCR for elt-322 bp, est-147 bp, bfpA-367 bp, aatA-630 bp and eae-881 bp. *Rotavirus* antigen and *C.difficile* toxin A&B detection were performed by ELISA. Parasitic agents were studied by doing a direct stool examination. Patient's clinical presentation, severity score, outcome, type and courses of antibiotics received were analysed between cases and controls.

**Results:** In this study Diarrhoeagenic *E. Coli* such as E.T.E.C., E.A.E.C. and E.P.E.C. were isolated in 25%, 17% and 7% respectively. The diarrhoeagenic *E.coli* showed high levels of multidrug resistance. Maximum resistance was seen against nalidixic acid (97.5%). *C.difficile* toxin was seen in 9% of cases, while *Rotavirus* was found in 8% of the cases. Mean

**Conclusion:** Rotavirus and *C.difficile* are the major causative agents of hospital acquired diarrhoea in the developed world but in our country Diarrhoeagenic *E.coli* are responsible for majority of cases of hospital acquired diarrhoea. Exact reasons for this finding are not known but it could be related to lack of stringent quality control while preparing and storing formula milk preparation. The statistically significant factors for the development of nosocomial diarrhoea were hospital stay, usage of antibiotics (vancomycin, imipenem and metronidazole) and nasogastric feeding. Nosocomial diarrhoea is also most common in children less than 5 years.

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**Nosocomial infections – 5 years of prevalence studies in the Czech Republic**

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**Background:** As an important part of the nosocomial infections (NI) surveillance, hospital epidemiologists from the faculty type hospitals in the Czech Republic perform the one-day prevalence studies in 10 University Hospitals since the year 2005. Up to now, the point-prevalence studies included surgery, urology, neurology, cardiology, neurosurgery, otorhinolaryngology, traumatology, gynecology and intensive care units departments. The aim is to obtain the descriptive and clear data in the time line, using the simple questionnaire method, easy to perform, easy to repeat and cheap.

**Methods:** The methodic approach is close to the HELICs (Hospital in Europe Link for Infection Control through Surveillance) protocol, as the current consensus for prevalence studies in european countries. In each of the involved hospital, the medical files of all patients hospitalised in the given department at the date of prevalence study are